Dermatology and Syphilology

THE Power for Good and Evil of Arsenic as a Remedy for Skin Diseases—The first knowledge of the specific pharmacodynamic effects of arsenic on the skin was gathered from observations on arsenic eaters, and from reports of various epidemics of arsenic poisoning.

Dermatologists learned long ago to restrict the use of arsenic to certain groups of chronic dematoses such as lichen planus, dermatitis herpetiformis, leucaemias. Its use in chronic eczemas is abandoned; in psoriasis it is used much less than before; and in acute dermatoses its use is considered definitely contraindicated.

The outstanding effect of arsenic on the skin is the exaggeration and stimulation of all nutritional and functional activities. Of these we are concerned here with the tendency of arsenic to stir up inflammatory dermatoses of eczematoid type.

The first notice of this type of arsenic reaction was served on the profession with the advent of the arsphenamine therapy in syphilis, particularly where used as a routine procedure in courses and series of a certain number of injections. Exfoliating arsenical dermatitis with exceedingly grave reactions and a number of fatalities were reported. Fortunately, however, in 1920 the important discovery made by Ravaut of France, and introduced in this country by McBride and Dennie, that sodium thiosulphate is a chemical antidote of arsenic has decreased but by no means removed exfoliating dermatitis from the dreaded and fatal episodes in the lives of syphilitics.

The statement will bear repetition that many of these consequences can be prevented if the physician will look for and detect the first prodromal and warning signs of the arsenical intolerance and the impending danger. These signs, as so ably portrayed by John Stokes, are: (1) small punctate subcuticular flush about the trunk, neck and flexures on the day following the injection; (2) patches of dermatitis at the flexures, upon the shins, or the face. These may be present for some days or even a week before the explosion; (3) severe itching of the skin on the day following the injection; (4) scarlatinoform or morbilliform erythemas.

A new and further important observation has been made by Throne, Van Dyck and associates,[2] who have reported a series of eczema cases in which the history was suggestive of a possibility of arsenic absorption through food, environmental or occupational channels. They treated these patients with intravenous injections of sodium thiosulphate and were able not only to clear up the skin lesions, but also to demonstrate the elimination of arsenic in the urine. Further elaboration of this observation may prove valuable in many other cases of chronic eczema with seemingly obscure etiology; and it also adds another emphatic reminder of the potentially powerful irritating effects of arsenic on the skin.

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1. J. Stokes: Modern Clinical Syphilology, 1926.
2. Throne, Van Dyck, etc.: New York State Journal of Medicine, October 15, 1926.

Endocrinology

IODIN Therapy in Neurocirculatory Asthenia—During the World War physicians of all participating nations were puzzled by a symptom complex which manifested itself in many thousands of soldiers. It received various appellations: "irritable heart," "effort syndrome," "neurocirculatory asthenia," "autonomic imbalance," and "sympathicotonia." Many of the symptoms mimicked the clinical picture of Graves' disease in mild form, namely, palpitation, tachycardia, tremor, sweating, nervousness, excitability and irritability, insomnia, and lack of energy. Loss of weight was exceptional, although the majority of such individuals were apt to be undernourished rather than obese. Goiter was sometimes noted, but whether it was coincidental or related to the syndrome remained uncertain; at any rate the goiter was not of the hyperplastic variety (highly vascular with thrill and bruit characteristic of Graves' disease). Exophthalmus and the so-called thyroid eye signs were usually absent and, if present, were rarely pronounced. The basal metabolic rate was almost always normal. Occasionally a slight elevation was recorded (15 to 25 per cent plus). Repetition of the test usually disclosed a normal rate.

This syndrome is frequently encountered in civil life, especially in girls and young women and sometimes in men. Many of these patients have been regarded as victims of mild Graves' disease; some of them, therefore, have received inhibitory roentgen therapy to the thyroid gland; others have been subjected to partial thyroidectomy. Such treatment almost uniformly has failed to relieve the symptoms. The hypothesis of an hyperthyroidism as the fundamental cause seemed to be erroneous.

It was equally unsatisfactory, and futile, to dismiss these patients with a diagnosis of neurasthenia. Digitalis had but little influence on the tachycardia or subjective symptoms. Sedatives, such as bromides, were rarely effective and at best provided only temporary relief. Relatively slight emotional strain rather than physical effort evoked or exaggerated the syndrome, and yet psychotherapy, or "skillful neglect," proved less satisfactory than might have been anticipated. Rest cures, change of climate, ocean voyages, and all the gamut of medical artistry accomplished but little for this group of patients.

Critical opinion had about dismissed the idea of thyroid accountability when Kessel and Hyman, about two years ago, advanced the thesis that autonomic imbalance and Graves' disease were practically identical except for the absence in the former, and the presence in the latter, of an increased basal metabolism. Indeed they conceived of autonomic imbalance as a preliminary stage of Graves' disease and claimed that they had actually witnessed this transformation.

In the past few weeks the question has been reopened by an interesting contribution from Strouse and Binswanger[1] of Chicago. In a preliminary report of fifty cases, thirty-two of which had been "carried through long enough to permit of analytic study"; they announce that iodin medication produced remarkable and prompt relief of the symp-

1. Jour. Amer. Med. Assoc., 1927, 88, 161-164.